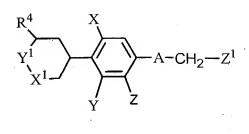
What is claimed is:

## 1. A compound of formula I



or a pharmaceutically acceptable salt thereof wherein:

A is structure i, ii, iii, or iv

 $X^1$  and  $Y^1$  together form the group  $-C(=O)N(R^5)$ - wherein  $X^1$  is either C(=O) (and  $Y^1$  is  $NR^5$ ) or  $X^1$  is  $NR^5$  (and  $Y^1$  is C(=O)).

 $10 Z^1$  is

- (a)  $NHC(=O)R^1$ ,
- (b)  $NHC(=S)R^1$ ,
- (c) NH-het<sup>1</sup>,
- (d) O-het1,
- (e) S-het<sup>1</sup>, or
  - (f)  $het^2$ ;

 $R^1$  is

- (a)  $NH_2$ ,
- 20 (b) NHC<sub>1-4</sub>alkyl,
  - (c)  $C_{1-4}$ alkyl,
  - (d) C<sub>2-4</sub>alkenyl,
  - (e)  $-CH_2C(=O)C_{1-4}alkyl$ ,
  - (f) OC<sub>1-4</sub>alkyl,
- 25 (g)  $SC_{1-4}$ alkyl, or
  - (h) C<sub>3-6</sub>cycloalkyl;

Each X,Y, and Z is independently selected from

- (e) H,
- (f) Cl,
- (g) F, or
- 5 (h) CH<sub>3</sub>

R<sup>4</sup> is

- (a) H,
- (b)  $C_{1-4}$ alkyl,
- (c) OC<sub>1-4</sub>alkyl,
- 10 (d) SC<sub>1-4</sub>alkyl, or
  - (e) NHC<sub>1-4</sub>alkyl;

 $R^5$  is

- (a) H,
- (b) C<sub>1-4</sub>alkyl, or
- (c)  $-(CH_2)_n-W_1-(CH_2)_n-Z^3$ ;

 $W_1$  is

- (a)  $-CH_{2}$ -,
- (b) -CH=CH-,
- 20 (c) -C≡C-, or
  - (d) Y

 $Z^3$  is

$$-W_2 - \sqrt{\sum_{i=1}^{N_{22}}}$$

 $W_2$  is

- (a) -O-,
- (b)  $-N(R_{25})$ -, or
- (c)  $-C(=O)-N(R_{25})$ -, wherein either the carbon or the nitrogen atom of the amide may be bound to a carbon atom of the phenyl ring of  $\mathbb{Z}^3$ ;

 $R_{22} \ {\rm is} \ (CH_2)_t NR_{23}R_{24}, \ H, \ halo, \ C_{1\text{-4}}alkyl, \ -CN, \ -OH, \ -O-C_{1\text{-4}}alkyl, \ -S(O)_uC_{1\text{-4}}alkyl, \ and \ -C(=O)NH_2$ 

R<sub>23</sub> is H or C<sub>1-4</sub> alkyl;

 $R_{24} \text{ is is H, C}_{1\text{-}4} \text{ alkyl, -S(O)}_2\text{-}C_{1\text{-}4} \text{ alkyl, -C(=O)-C}_{1\text{-}4} \text{ alkyl, -C(=NH)-NH}_2,$   $-C(=O)\text{-}C(HR_{26})\text{-}NR_{27}R_{28};$ 

 $R_{25}$  is H or  $C_{1-4}$  alkyl;

R<sub>26</sub> is H, C<sub>1-4</sub> alkyl which can be optionally substituted by -OH, -NH<sub>2</sub>, -NH-C(=NH)-NH<sub>2</sub>, -SH, -SCH<sub>3</sub>, -COOH, -C(O)NH<sub>2</sub>, and phenyl which can be optionally substituted with -OH, imidazole, indole, or R<sub>26</sub> and R<sub>27</sub> together with the carbon atom to which R<sub>26</sub> attaches and the nitrogen atom to which R<sub>27</sub> attaches form a heterocycloalkyl;

R<sub>27</sub> is H or C<sub>1-4</sub> alkyl;

 $R_{28} \ is \ H, \ C_{1\cdot 4} \ alkyl, \ -S(O)_2 - C_{1\cdot 4} alkyl, \ -C(=O) - C_{1\cdot 4} \ alkyl, \ -C(=NH) - NH_2,$   $-C(=O) - C(HR_{26}) - NR_{27}R_{27}$ 

t is 0, 1;

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u is 0, 1, 2;

15 n is 1 or 2;

het<sup>1</sup> is a C-linked five- (5) or six- (6) membered heterocyclic ring having 1-4 heteroatoms selected from the group consisting of oxygen, sulfur, and nitrogen; het<sup>1</sup> being optionally substituted on one or more carbon atoms by 1-2 substituents selected from C<sub>1</sub>-C<sub>4</sub>alkyl, amino, C<sub>1</sub>-C<sub>4</sub>alkylamino, C<sub>1</sub>-C<sub>4</sub>alkyloxy, halogen –CN, =O, =S, and being optionally substituted with C<sub>1</sub>-C<sub>4</sub>alkyl;

het<sup>2</sup> is a N-linked five- (5) or six- 6) membered heterocyclic ring having at least one nitrogen atom, and optionally having one oxygen or sulfur atom; het<sup>2</sup> being optionally substituted on one or more carbon atoms by 1-2 substituents selected from C<sub>1</sub>-C<sub>4</sub>alkyl, amino, C<sub>1</sub>-C<sub>4</sub>alkylamino, C<sub>1</sub>-C<sub>4</sub>alkyloxy, halogen –CN, =O, =S, and being optionally substituted with C<sub>1</sub>-C<sub>4</sub>alkyl;

heterocycloalkyl is a four (5) or seven (7) membered saturated heterocyclic ring having 1-4 heteroatoms selected from the group consisting of oxygen, sulfur, and nitrogen; heterocycloalkyl being optionally substituted on one or more carbon atoms by 1-2 substituents selected from C<sub>1</sub>-C<sub>4</sub>alkyl, amino, C<sub>1</sub>-C<sub>4</sub>alkylamino, C<sub>1</sub>-C<sub>4</sub>alkyloxy, halogen –CN, =O, =S, and being optionally substituted with C<sub>1</sub>-C<sub>4</sub>alkyl;

at each occurrence, alkyl, alkenyl, or cycloalkyl is optionally substituted with 1-3 halo, -OH, -OC<sub>1-4</sub>alkyl, and

Aryl refers to phenyl, biphenyl, or naphthyl, optionally substituted with halo,

C<sub>1-4</sub> alkyl, OH, OC<sub>1-4</sub> alkyl, -CH<sub>2</sub>NH<sub>2</sub>, -CH<sub>2</sub>NH(C<sub>1-4</sub> alkyl), and S(O)<sub>u</sub>C<sub>1-4</sub>alkyl.

- 2. The compound of claim 1, wherein A is formula ii.
- 5 3. The compound of claim 1, wherein X is F.
  - 4. The compound of claim 3, wherein Y is F.
  - 5. The compound of claim 1, wherein  $Z^1$  is  $-NH-C(O)R_1$ .

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- 6. The compound of claim 5, wherein R<sub>1</sub> is selected from C<sub>1-4</sub>alkyl optionally substituted with 1-3 halo.
- 7. The compound of claim 6, wherein  $R_1$  is  $C_{1-4}$ alkyl substituted with 1-2 halo.

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- 8. The compound of claim 1, wherein  $Z^1$  is  $-NH-C(S)R_1$ .
- 9. The compound of claim 8, wherein R<sub>1</sub> is selected from C<sub>1-4</sub>alkyl optionally substituted with 1-3 halo.

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- 10. The compound of claim 9, wherein  $R_1$  is  $C_{1-4}$ alkyl substituted with 1-2 halo.
- 11. The compound of claim 1, wherein  $Y^1$  is -C(=0)- and  $X^1$  is  $-N(R_5)$ -.
- 25 12. The compound of claim 1, wherein  $X^1$  is -C(=0)- and  $Y^1$  is  $-N(R_5)$ -.
  - 13. A compound selected from the group consisting of  $N-(\{(5S)-3-[3-fluoro-4-(6-oxopiperidin-3-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl\}methyl)acetamide;$
- N-( $\{(5S)$ -3-[3-fluoro-4-(6-oxopiperidin-3-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanamide; 2,2-dichloro-N-( $\{(5S)$ -3-[3-fluoro-4-(6-oxopiperidin-3-yl)phenyl]-2-oxo-1,3-

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2,2-difluoro-N-(\{(5S)-3-[3-fluoro-4-(6-oxopiperidin-3-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)ethanethioamide;
2,2-difluoro-N-(\{(5S)-3-[3-fluoro-4-(6-oxopiperidin-3-yl)phenyl]-2-oxo-1,3-
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- $N-(\{(5S)-3-[3,5-difluoro-4-(6-oxopiperidin-3-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl\}$  methyl)acetamide;
  - 2,2-dichloro-*N*-({(5*S*)-3-[3,5-difluoro-4-(6-oxopiperidin-3-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)acetamide;
  - $N-(\{(5S)-3-[3,5-difluoro-4-(6-oxopiperidin-3-yl)phenyl]-2-oxo-1,3-oxazolidin-5-value (1998) -2-oxo-1,3-oxazolidin-5-value (1998) -2-oxazolidin-5-value (19$
- 10 yl}methyl)-2,2-difluoroethanethioamide;

oxazolidin-5-yl}methyl)acetamide;

- *N*-({(5*S*)-3-[3,5-difluoro-4-(6-oxopiperidin-3-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)-2,2-difluoroacetamide;
- N-({(5S)-2-oxo-3-[4-(6-oxopiperidin-3-yl)phenyl]-1,3-oxazolidin-5-yl}methyl)acetamide;
- $N-(\{(5S)-2-oxo-3-[4-(6-oxopiperidin-3-yl)phenyl]-1,3-oxazolidin-5-yl\}$  methyl)propanamide,
  - 2,2-dichloro-N-({(5S)-2-oxo-3-[4-(6-oxopiperidin-3-yl)phenyl]-1,3-oxazolidin-5-yl}methyl)acetamide;
  - 2,2-difluoro-N-({(5S)-2-oxo-3-[4-(6-oxopiperidin-3-yl)phenyl]-1,3-oxazolidin-5-
- 20 yl}methyl)ethanethioamide;
  - 2,2-difluoro-N-({(5S)-2-oxo-3-[4-(6-oxopiperidin-3-yl)phenyl]-1,3-oxazolidin-5-yl}methyl)ethanethioamide;
  - ({(5S)-3-[4-(1-methyl-6-oxopiperidin-3-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)acetamide;
- N-({(5S)-3-[3-fluoro-4-(2-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)acetamide;
  - N-({(5S)-3-[3-fluoro-4-(2-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanamide;
  - $2,2-difluoro-N-(\{(5S)-3-[3-fluoro-4-(2-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-(3-fluoro-4-(3-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-(3-fluoro-4-(3-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-(3-fluoro-4-(3-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-(3-fluoro-4-(3-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-(3-fluoro-4-(3-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-(3-fluoro-4-(3-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-(3-fluoro-4-(3-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-(3-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-(3-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-(3-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-(3-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-(3-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-(3-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-(3-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-(3-oxopiperid$
- 30 oxazolidin-5-yl}methyl)ethanethioamide;
  - N-({(5S)-3-[3,5-difluoro-4-(2-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)acetamide;

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N-({(5S)-3-[3,5-difluoro-4-(2-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanamide;
N-({(5S)-3-[3,5-difluoro-4-(2-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)-2,2-difluoroethanethioamide;
N-({(5S)-2-oxo-3-[4-(2-oxopiperidin-4-yl)phenyl]-1,3-oxazolidin-5-yl}methyl)acetamide;
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2,2-difluoro-*N*-({(5*S*)-2-oxo-3-[4-(2-oxopiperidin-4-yl)phenyl]-1,3-oxazolidin-5-yl}methyl)ethanethioamide;

 $N-(\{(5S)-2-oxo-3-[4-(2-oxopiperidin-4-yl)phenyl]-1,3-oxazolidin-5-$ 

- yl}methyl)propanamide; and  $N-(\{(5S)-3-[4-(1-methyl-2-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)acetamide.$ 
  - 14. A compound selected from the group consisting of
- N-({(5S)-3-[3-fluoro-4-(6-oxopiperidin-3-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)acetamide; N-({(5S)-3-[3-fluoro-4-(6-oxopiperidin-3-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanamide;
  N-({(5S)-3-[3,5-difluoro-4-(6-oxopiperidin-3-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)acetamide;
- N-({(5S)-2-oxo-3-[4-(6-oxopiperidin-3-yl)phenyl]-1,3-oxazolidin-5-yl}methyl)acetamide;
   N-({(5S)-2-oxo-3-[4-(6-oxopiperidin-3-yl)phenyl]-1,3-oxazolidin-5-yl}methyl)propanamide;
   ({(5S)-3-[4-(1-methyl-6-oxopiperidin-3-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl-6-oxopiperidin-3-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl
- yl}methyl)acetamide;
  N-({(5S)-3-[3-fluoro-4-(2-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)acetamide;
  N-({(5S)-3-[3-fluoro-4-(2-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanamide;
- N-({(5S)-3-[3,5-difluoro-4-(2-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)acetamide;
  N-({(5S)-3-[3,5-difluoro-4-(2-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanamide;

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N-(\{(5S)-2-oxo-3-[4-(2-oxopiperidin-4-yl)phenyl]-1,3-oxazolidin-5-yl}methyl)acetamide; N-(<math>\{(5S)-2-oxo-3-[4-(2-oxopiperidin-4-yl)phenyl]-1,3-oxazolidin-5-yl}methyl)propanamide; and
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- $N-(\{(5S)-3-[4-(1-methyl-2-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl\}$ methyl)acetamide.
  - 15. A compound selected from the group consisting of
  - 2,2-dichloro-*N*-({(5*S*)-3-[3-fluoro-4-(6-oxopiperidin-3-yl)phenyl]-2-oxo-1,3-
- 10 oxazolidin-5-yl}methyl)acetamide;
  - 2,2-difluoro-*N*-({(5*S*)-3-[3-fluoro-4-(6-oxopiperidin-3-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)ethanethioamide;
  - 2,2-difluoro-*N*-({(5*S*)-3-[3-fluoro-4-(6-oxopiperidin-3-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)acetamide;
- 2,2-dichloro-*N*-({(5*S*)-3-[3,5-difluoro-4-(6-oxopiperidin-3-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)acetamide;
  - $N-(\{(5S)-3-[3,5-difluoro-4-(6-oxopiperidin-3-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl\}$ methyl)-2,2-difluoroethanethioamide;
  - $N-(\{(5S)-3-[3,5-difluoro-4-(6-oxopiperidin-3-yl)phenyl]-2-oxo-1,3-oxazolidin-5-velocity -10-2000 -10$
- 20 yl}methyl)-2,2-difluoroacetamide;
  - 2,2-dichloro-N-({(5S)-2-oxo-3-[4-(6-oxopiperidin-3-yl)phenyl]-1,3-oxazolidin-5-yl}methyl)acetamide;
  - 2,2-difluoro-N-({(5S)-2-oxo-3-[4-(6-oxopiperidin-3-yl)phenyl]-1,3-oxazolidin-5-yl}methyl)ethanethioamide;
- 25 2,2-difluoro-N-({(5S)-2-oxo-3-[4-(6-oxopiperidin-3-yl)phenyl]-1,3-oxazolidin-5-yl}methyl)ethanethioamide;
  - 2,2-difluoro-N-({(5S)-3-[3-fluoro-4-(2-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)ethanethioamide;
  - N-({(5S)-3-[3,5-difluoro-4-(2-oxopiperidin-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-
- yl}methyl)-2,2-difluoroethanethioamide, and 2,2-difluoro-*N*-({(5*S*)-2-oxo-3-[4-(2-oxopiperidin-4-yl)phenyl]-1,3-oxazolidin-5-

- 16. The compound 5-{2,6-difluoro-4-[(5R)-2-oxo-5-(1H-1,2,3-triazol-1-ylmethyl)-1,3-oxazolidin-3-yl]phenyl}piperidin-2-one.
- 17. A method for the treatment of microbial infections in mammals comprising administration of an effective amount of compound of claim 1 to said mammal.
  - 18. The method of claim 17 wherein said compound of claim 1 is administered to the mammal orally, parenterally, transdermally, or topically in a pharmaceutical composition.

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- 19. The method of claim 18 wherein said compound is administered in an amount of from about 0.1 to about 100 mg/kg of body weight/day.
- 20. The method of claim 18 wherein said compound is administered in an amount of from about 1 to about 50 mg/kg of body weight/day.
  - 21. A pharmaceutical composition comprising a compound of claim 1 and a pharmaceutically acceptable carrier.